



August 14, 2007

Anderson & Associates, Inc.  
Attn: Trevor M. Kimzey, P.E.  
100 Ardmore Street  
Blacksburg, VA 24060

Re: SP 07-021 First & Main, Phase I, Site Development Plan, dated May 4, 2007,  
(revised July 24, 2007) 1500 South Main Street, Second Review.

Dear Mr. Kimzey:

The Planning and Engineering Department has completed the second review of the First and Main, Phase I site development plan. Site plan approval is denied for the second review.

**This review of the Phase I site development plan does not confer approval or denial of any building, structure, use or parking lot on any plan of development for adjoining property, including the Phase II site development plan.**

The following comments must be addressed prior to final Phase I plan approval:

**Planning Comments**

*Steve M. Hundley, AICP, Zoning Administrator*

**GC District Standards –**

1. On the General Notes 2 sheet, list the General Commercial zoning district standards. [Section 3152 (a) through (k)]
2. **As stated in the first review letter at comment 5**, the maximum lot coverage in the GC district is 85 percent and must be provided in a table listing each lot with the proposed lot coverage. The table on Sheet C1.01 does not provide complete information for OP-5 and does not provide any information on tax map 287-A 41A, although both lots show proposed phase 1 impervious area. [Section 3152(e)]
3. **As stated in the first review letter at comment 6**, note the height in feet of each building, measured from the front entrance at grade to the highest point on the structure. Two sections of Block 600 do not indicate height. Block 100, 700, and the parking garages do not show a height at all. Block 500 is identified as 37 foot height on the site plan but measures 45 feet on elevation plan. Please reconcile the two dimensions. **Also, as stated in the first review letter at comment 6**, note, in compliance with proffer 1.g., the elevation of the highest point on each building, to include the parking structures, located within 200 feet of the rear lot lines of the Kennedy Avenue lots. [Section 5132(f)]

**Proffers –**

4. **As stated in the first review letter at comment 9.a and b**, demonstrate that the developer has issued options on **fence color and location**, among other attributes. Provide the residents' input, in writing and with illustrations, where necessary. To date, the Town has received one letter, with the signatures of some or all of the

- Kennedy Avenue residents, that indicates their preferences regarding the developer's options with regard to the buffer. [Proffer 1.a. & b.]
5. **As stated in the first review letter at comment 9.c,** demonstrate that the developer has received input from the Kennedy Street adjacent homeowners regarding **deciduous canopy trees and under story flowering trees**. Provide the residents' input, in writing and with illustrations, where necessary. To date, the Town has received one letter, with the signatures of some or all of the Kennedy Avenue residents, that indicates their disapproval of the developer's options with regard to the buffer. [Proffer 1.a. & b.]
  6. **As stated in the first review letter at comment 9.c,** the walled **trash pick-up area** must be in compliance with proffer 1.d. such that "the entrance to the walled service courtyard by motorized vehicles shall be located past the northern end of the Kennedy Avenue properties..." The entrance appears to be 12 feet south of the northern end of the Kennedy Avenue properties on Sheet 1.07. The entrance must comply as stated above. [Proffer 1.d.]
  7. **As stated in the first review letter at comment 9.g,** a **100 foot radius buffer** is required, starting from the northwest corner of the Country Club Drive lot, depicted on Sheet C5.05. The trail has been moved from parallel to the arc of the circumference of the buffer, and now crosses perpendicular through the buffer as permitted by the proffer and the zoning ordinance. However, the remainder of the buffer must provide architectural and/or vegetative screening trees to comply with the buffer requirement within the 100 foot buffer area. In other words, the entire area within the arc (other than the trail and shoulders) should include vegetative screening. [Proffer 2.c.]
  8. **As queried in the first review letter at comment 9.j,** is the depicted **buffer yard** on Sheets C5.03; C5.04; and C5.05., in compliance with an agreement with Montgomery County Schools. Provide signed documentation for the Town's records that the buffer is the one agreed upon. [Proffer 3.b.]
  9. **As stated in the first review letter at comment 9.k,** identify what the **discernable center** is (i.e. depict the attributes that comply with proffer 6.c.). Sheets C1.13 and C1.14 identifies the location of a 20,300 square foot discernable center, but refers to "architectural plans" for "hardscape information and details." In order for the Zoning Administrator to ensure continuing compliance, this information and detail must be on the site plan. [Proffer 6.c.]
  10. The **previous boundaries** of the vacated or line adjusted lots are depicted on Sheet C0.04 as specified at comment 9.m. of the first review letter. However, the lots still need to be labeled as identified in the proffer (eg. lots 10, 11, 12, etc.) Labeling the old lots will ensure that the Zoning Administrator is able to enforce the proffers. [Proffer 8]

#### **Site Development Standards –**

##### **Parking, interior travelways, & sidewalks --**

11. **As stated in the first review letter at comment 10,** show the required **sidewalk** along King Street and Hubbard Street (Sheets 1.05 and C1.11.) The sidewalk should extend east to the proposed driveway entrance on King Street, and west to

the trail head, then to the edge of the property on Hubbard Street. [Section 5120(d)(1)]

12. **As stated in the first review letter at comment 12**, “in order to retain the proposed parking configuration, request an exception, by letter, to the requirement for **parking to be located behind the front building line**. The previous version of the Phase I site plan depicted development on areas that are now shown as vacant out parcels. The letter, addressed to the Zoning Administrator, should provide an explanation as to why the exception should be granted, and **specify the location and number of spaces the request is for**. [Section 4559(c) & 4553(b)]
13. **As stated in the first review letter at comment 16**, block 700 (block D on the previous plan) requires a Class A **loading area**, instead of the two proposed Class B loading spaces on Sheet C'1.13. [Section 5240; 5241; & 5242]
14. The **parking summary** states that **928** parking spaces are provided. The Landscaping Notes Sheet C5.01, General Notes #5 states **924** parking spaces. I counted no more than **911** spaces. Reconcile these numbers and provide the correct number of parking spaces.
15. **Parking Analysis** for shared & offsite parking [Section 5221 & 5222] –
  - a. Fast Food Restaurants without seating requires one parking space per 60 square feet. The 1 space per 400 square feet is for areas such as store rooms, waiting areas, bath rooms, etc. in general and small restaurants.
  - b. The area listed in Block 300 as Personal Services use is identified as Retail use on the site development plan. Reconcile these two and correct where necessary.
  - c. The retail area of Block 400 is listed as 25,391 square feet on the parking analysis, but is 9,888 square feet on the site development plan.
  - d. Based on the above, the required parking should be 1098 spaces instead of 1,091. Therefore, the total required parking should be 878 instead of 873.
  - e. As stated above at comment 13, the number of proposed actual parking spaces is unclear. Recalculate and provide the correct number where necessary.
  - f. Provide adequate documentation that all off-site parking is either “*...owned by or leased for at least a 20 year term or through a permanent easement by the owner of the use being served.*” [Section 5221(5)]
  - g. Since there are no proposed structures or uses depicted for the 5 out parcels on the Phase I site development plan, the alternate parking analysis (Section B) that includes the out parcels was not reviewed.
  - h. Be aware that future development proposals for the out parcels and for Phase II may be impacted by the offsite and/or shared parking requirements.

#### **Landscaping --**

16. I have counted 80 parking lot trees in **tree islands** that comply with the dimensional standards of the zoning ordinance. I have counted 911 parking spaces. The number of parking spaces listed in the plan is either 924 or 928. Therefore, either 91 or 92 parking lot trees, in tree islands that comply with the dimensional standards (i.e. 18' x 18' or 324 sq. ft. in irregular shape,) are required. Provide for an additional 11 or 12 islands. [Section 5427(b) & (c)]

### Buffers and Screening --

17. As stated in the first review letter at comment 28, show how the loading dock for the Books-A-Million will be screened. [Section 5330(b)(4)]

### Exterior Lighting --

18. As stated in the previous review letter at comment 43, the Lighting Plan (Sheet C0.07) identifies foot candles exceeding the maximum .1 fc permitted on residential properties along the west property line, south of the Margaret Beeks School. [Section 5130(c); 5601(f)]
19. The Lighting Plan identifies foot candles exceeding the maximum .5 fc permitted on public rights-of-way at the two vehicle entrances on South Main Street. [Section 5130(c); 5601(f)]
20. The phase 1 Lighting Summary average is listed as 5.87 fc, which exceeds the maximum average maintained horizontal illuminance level of 5 fc for commercial parking lot use. The exterior lighting may need to be divided into sectors for parking lots and commercial building exteriors in order to acquire reasonable average maintained horizontal illuminance for the various lighting uses. [Section 5130(c); 5601(f)]

### Signs --

21. The proposed identification sign is 6.5 feet wide at the base, but the sign base identified on Sheet C1.16 is 30 feet. Please reconcile the two dimensions. Be aware that when applying for the sign permit, the sign plan must define the height of the required base and the sign area above the base. A sign permit is required for all new commercial signs. Approval of the site development plan does not imply approval of a particular sign size. [Section 5534]

### Miscellaneous Comments --

22. On Sheet C0.04, the current use of 287-8-A is “**Vacant**” use, as correctly identified on Sheet C1.01 of the 5/4/07 plan, instead of “Single Family Detached” as now identified. [Section 5130(a)(8)]
23. As stated in the first review letter at comment numbers 52, 55, and 56, there is continuing confusion regarding the status of tax map numbers 287-A 29 and 287-A 30 owned by CLB Family Limited Partnership. On Sheet C0.01 CLB Family Limited Partnership is listed as one of the property owners of Phase 1. On Sheet C0.02, the lots are not listed in General Notes #1 Property Information. On Sheet C0.04, the lots are identified outside of the metes and bounds of the development in the same manner as the other adjacent owners. On Sheet C0.05, the buildings on the lots are identified for demolition along with other buildings on the Phase 1 project. On Sheet 0.06, C1.01, C1.11, C1.12, proposed parking and travelway is depicted on the lots.
24. Identify OP 1 through OP 5 lots on the plan sheets so that one does not have to cross reference the tax map number to the out parcel number.
25. As stated in the first review letter at comment number 58, provide the scale and height of the proposed parking structure elevations views. [Section 5130(a)(19)]

26. As stated in the first review letter at comment number 60, show the location of the original pre-rezoning parcel areas on a 1" = 100' scale. [Section 5130(a)(16)]

### **Engineering Comments**

*Jim Henegar, P.E., Town Engineer*

#### **Water**

1. Ensure that all utility crossings are shown on the waterline profile and that the required horizontal and vertical separation is obtained.
2. There are utility crossings of the waterline that do not meet Section 1.54 1 of the *Town of Blacksburg Standards and Specifications Water Distribution System*. This section states that the minimum vertical separation between the waterline and other utilities shall be 18 inches. This requirement is not met at the following locations on Waterline A: Stations 10+50, 13+60, 15+60, 19+50, 23+36, 24+95, 31+78, 33+53, 34+22, 34+40, 35+10, 36+04, 36+80, 38+40, 39+70, 40+85, 42+91, and 45+76.
3. Install an air release valve on Waterline C near Station 10+55.
4. Install an 8-inch gate valve on all waterline stub outs for future connections to the out parcels.
5. The waterline testing fee for this project is \$1,764. (Combined water and sanitary sewer testing fees total \$3,570.00.)
6. Connection fees are based on the meter size as provided on the plans and the Town's connection fees as of July 2007. For a 2-inch meter, the water connection fee will be \$7,992 per connection and the sanitary sewer connection fee will be \$20,152 per connection. This cost assumes that the contractor will install the laterals. If the Town installs the laterals, the connection fees will be \$8,801 per connection for water and \$20,864 per connection for sanitary sewer. Connection fees are based upon the fees in effect at the time the building permit application is submitted.

#### **Transportation**

7. Mark designated fire lanes with painted curbs and signs at the following locations (referencing Plan Sheet C0.06):
  1. North and south drive aisle curbs on the west end of the main entrance driveway between the parking bays and Block 300.
8. Revise the bollard detail on Plan Sheet C1.19 to show a removable bollard.

#### **Grading**

9. Provide a grading note stating the south property line of the Gables Shopping Center property shall be staked in the field prior to rough grading and maintained throughout grading operations. While proposed contours no longer extend onto the Gables Shopping Center property, daylight points where proposed contours meet existing contours are located right on the property line. The staked property line will serve as a reference line for the grading contractor and town inspector. No grading will be allowed on adjacent properties without right of entry letters.

## Stormwater

10. Stormwater calculations do not identify the 25 year or 100 year storm elevations through the Contech Optimizer System or the effluent discharge channel identified as Drainage point #1 (1-DP-PST). Provide the specific location in the stormwater calculations where this information can be found.
11. The Contech detail provided on sheet C2.19 does not show 25 and 100 year storm elevations through the Contech Optimizer system. Provide standard hydraulic grade elevations for each storm through the Contech Optimizer system. The hydraulic grade line information provided for the outlet pond structure (on sheet C2.21) is standard hydraulic grade information that is to be provided in accordance with Sec 5-801 of the *Blacksburg Subdivision Ordinance* and shall also be submitted with the Contech detail. The Contech Optimizer system is an orifice controlled detention system, provide a standard stage elevation versus storage volume summary that indicates that the proposed storage volume of 283,043 cubic feet is the required minimum storage to detain the 25 year post development storm run off rate to the predevelopment discharge rate. Provide a standard table that compares how much storage is required for each of the detained storms and corresponds to the storage structures and volumes that are shown on the plan set sheet C2.19.
12. The Outlet Structure Detail on Sheet C2.21 for 1-POND-PST shows a 15 inch orifice at elevation 2096.5 and HydroCAD outlet device description details a 21 inch orifice. The detail does not appear to match the hydraulic calculations, please provide an explanation why the detail uses a different outlet device and revise as needed.
13. The outlet structure for the on site pond (1-Pond-PST) is labeled as SD 1-13 on the post development drainage map, plan sheet C2.21 and storm sewer inlet map. In the July 24, 2007 Anderson & Associates response letter, the response to first submittal review comment 39 identifies SD 1-13 as renamed to SD 1-14. It appears that the SD 1-14 designation has not been used. Please confirm that the outlet structure for pond detail sheet C2.21, structure "1-Pond-PST" in the HydroCad calculations and structure SD 1-13 on plan sheets and figures is the structure being referenced.
14. For Link 1-DET-PST the influent hydrograph rate is the same as the effluent hydrograph rate which does not indicate that any detention is being achieved through the structure. Explain why the peak Influent flow hydrograph rates for structure 1-DET-PST are less than the upstream combined discharge rates for 1-Comb-PST (as shown in HydroCAD output tables) for the 1, 2, 10, and 25 year storms. There is no detention between the Link 1-COMB-PST and Link 1-DET-PST and additional flow is added from SubCat 1-DA-PST. Why is the influent discharge rate less? HydroCAD output sheets identify the "Inflow Area" for Link 1-DET-PST as 7.82 Acres, which does not correspond to the post development drainage map or storm sewer inlet maps that indicate a drainage area of 137.4 acres that is routed into the Contech Optimizer system. Please clarify the discrepancy and resubmit calculations as needed.
15. The revised Contech Optimizer detail no longer shows any designated pipe volumes to detain the 25 year storm. Please provide an explanation of how the 25 year storm

is detained and confirm that the revised storage volume of 283,043 cubic feet is sufficient to detain the 25 year storm. (See also comment No. 11 above).

16. Provide hydraulic analysis and plan sheets that show the 100 year flood elevations to confirm that no flooding occurs around the proposed and existing buildings on site, nor on adjacent properties in accordance with Section 5120(g) of the *Blacksburg Zoning Ordinance*.
17. Appendix C of the stormwater calculations only provides information on the StormFilter water quality system, but does not provide basic information on the Optimizer water quantity management system. Provide Contech Optimizer information that explains the function of the hydraulic detention system.
18. Identify the design invert elevations for culverts 1, 2, and 3 along the proposed bike path and shown on plan sheets C2.03 and C2.05.

### **Erosion & Sediment Control**

19. Provide an engineer's estimate for the erosion & sediment control security and have the developer provide a security in the estimated amount. An erosion & sediment control security must be received before the Town will release the approved site plan.

### **Sanitary Sewer**

20. Referencing Plan Sheet C2.24, provide the minimum required separation between the water and sanitary sewer lines located at Station 70+68 in Storm Profile 3-1 – 3-9.
21. Remove references to Town of Blacksburg sanitary sewer construction on the utility plans. Only show sanitary sewer improvements which will be constructed by the development contractor and are necessary for this project. Make connections to the existing sanitary sewer system where needed to maintain existing flow. Necessary work outside the development on adjacent properties is the developer's responsibility and evidence of easements for this work must be shown for off property construction. New easements where needed must be obtained by the developer prior to release of approved site plans.
22. Referencing Sheet C4.14, move the connection to the existing sewer system to a point south of the proposed location to resolve conflicts with bored conduit, junction box and signal pole base for the traffic signal.
23. The sanitary sewer testing fee is \$1,806.00. (Combined water and sanitary sewer testing fees total \$3,570.00.) Utility testing fees must be received before the Town will release the approved site plan.

### **General**

24. Provide a construction schedule and have the developer pay applicable erosion & sediment control and public infrastructure inspection fees of \$210/week. Inspection fees must be received before the Town will release the approved site plan. **Supply an engineer's estimate of Phase I public improvements and provide the required public improvements security based on this amount. The public improvements security must be received before the Town will release the approved site plan.**

**Post Review Meeting --**

A post review meeting with the Engineering firm is mandatory, and the owner is encouraged to attend as well. The post review meeting has been scheduled for **10:30 a.m. Thursday, August 23, 2007** in the Town Council Conference Room.

Jim Henegar and I coordinated the review of this plan. Please contact Jim at 961-1124 (e-mail [jhenegar@blacksburg.gov](mailto:jhenegar@blacksburg.gov) ) or contact me at 961-1115, (e-mail [shundley@blacksburg.gov](mailto:shundley@blacksburg.gov)) if you have questions or concerns regarding this review.

Sincerely,

  
Steve M. Hundley, AICP,  
Zoning Administrator

Cc: James Schiely, Fairmount University Realty Trust